

DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY

(Under 37 CFR § 1.63; includes reference to PCT International Applications)

WHITMAN BREED ABBOTT & MORGAN LLP
File No.: KM40562-00

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention ENTITLED: *METHODS AND APPARATUS FOR IMPROVED LUMINESCENCE ASSAYS USING MICROPARTICLES*, the specification of which is attached hereto X was filed on December 23, 1997 as United States Application No. 08/998,137, with amendments through (if applicable, give details).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code § 119 of any foreign application(s) for patent or inventor's certificate or of any PCT International application(s) designating at least one country other than the United State of America listed below and have also identified below any foreign application for patent or inventor's certificate or any PCT International applications designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) on which priority is claimed:

Prior Foreign/PCT Application(s) [list additional applications on separate page]:

Country (or PCT)	Application Number:	Filed (Day/Month/Year)	Priority Claimed:	
			Yes	No

I hereby claim the benefit under Title 35, United States Code § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Prior U.S. (or U.S.-designating PCT) Application(s) [list additional applications on separate page]:

U.S. Serial No.:	Filed (Day/Month/Year)	PCT Application No.	Status (patented, pending, abandoned)
08/954,355	20/10/97		PENDING
08/437,348	9/5/95		PATENTED

DECLARATION FOR PATENT APPLICATION
AND POWER OF ATTORNEY (Under 37 CFR § 1.63)

WBAM Docket No. KM40562-00

I hereby appoint Barry Evans, Registration No. 22,802, and Whitman Breed Abbott & Morgan LLP, or their duly appointed associate, my attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to file continuation and divisional applications thereof, to receive the Patent, and to transact all business in the Patent and Trademark Office and in the Courts in connection therewith, and specify that all communications about the application are to be directed to the following correspondence address:

Barry Evans, Esq.
c/o WHITMAN BREED ABBOTT & MORGAN LLP
200 Park Avenue
New York, NY 10166

Direct all telephone calls to:
(212) 351-3000
to the attention of:
Barry Evans

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

INVENTOR(S):

Signature: [Signature] Date: 7/1/98

Full name of sole or first inventor: George B. Sigal
Residence: 5333 Trailway Drive, Rockville, Maryland 20853
Citizenship: United States of America

Signature: [Signature] Date: 7/1/98

Full name of 2nd joint inventor (if any): Jacob N. Wohlstadter
Residence: 9905 Gable Ridge Terrace, Apt. D, Rockville, Maryland 20850
Citizenship: United States of America

Signature: [Signature] Date: 6/12/98

Full name of 3rd joint inventor (if any): Satyanarayana Gudibande
Residence: 211 Cherrywood Terrace, Gaithersburg, Maryland 20878
Citizenship: ~~United States of America~~ INDIA IN

Signature: [Signature] Date: 6/12/98

Full name of 4th joint inventor (if any): Mark T. Martin
Residence: 6516 Old Farm Court, Rockville, Maryland 20852
Citizenship: United States of America

Signature: [Signature] Date: 6/10/98

Full name of 5th joint inventor (if any): James L. Wilbur
Residence: 13636 Spinning Wheel Drive, Germantown, Maryland 20872
Citizenship: United States of America

Post Office Address(es) of inventors [if different from residence]:

NOTE: In order to qualify for reduced fees available to Small Entities, each inventor and any other individual or entity having rights to the invention must also sign an appropriate separate "Verified Statement (Declaration) Claiming [or Supporting a Claim by Another for] Small Entity Status" form [e.g. for Independent Inventor, Small Business Concern, Nonprofit Organization, Individual Non-Inventor].

Whitman Breed Abbott & Morgan LLP
File No.: KM40562-00
Serial No.: 08/998,137
Filing Date: December 23, 1997

ASSIGNMENT

We, George B. Sigal, Jacob N. Wohlstadter, Satyanarayana Gudibande, Mark T. Martin, and James L. Wilbur, who reside respectively at: 5333 Trailway Drive, Rockville, MD 20853; 9905 Gable Ridge Terrace, Apt. D, Rockville, MD 20850; 211 Cherrywood Terrace, Gaithersburg, MD 20878; 6515 Old Farm Court, Rockville, MD 20852; and 13636 Spinning Wheel Drive, Germantown, MD 20872, have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled: **METHODS AND APPARATUS FOR IMPROVED LUMINESCENCE ASSAYS USING MICROPARTICLES**, which application was executed by us and **MESO SCALE TECHNOLOGIES LLC**, whose address is 16020 Industrial Drive, Gaithersburg, MD 20877, and which, together with its successors and assigns is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited, and of confirming the same or any part thereof heretofore acquired by Assignee.

Now, therefore, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

1. Assign and convey to and confirm in Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or discoveries or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;

2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in our names or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;

3. Authorize and request the Commissioner of Patents of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;

4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to Assignee without encumbrance;

5. Bind our heirs and legal representatives, as well as ourselves to do, upon Assignee's request and at its expense, but without additional consideration to us or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us or our heirs or representatives if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in our control or in the control of our heirs or legal representatives and which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

The effective date of this instrument is the 1 day of

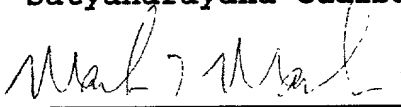
JULY, 1998.

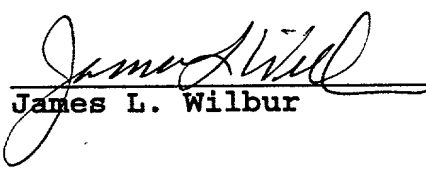
In testimony of which we have affixed our signatures.


George B. Sigal


Jacob N. Wohlstadter


Satyanarayana Gudibande


Mark T. Martin


James L. Wilbur

State of Maryland)
County of Montgomery) SS.:

On this 15th day of July, 1998 before me appeared **George B. Sigal**, to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged the same to be his free act and deed.

Conna & Riccardi
Notary Public My Comm. Exps. 10/3, 2000

(OFFICIAL SEAL)

State of Maryland)
County of Montgomery) SS.:

On this 15th day of July, 1998 before me appeared **Jacob N. Wohlstadter**, to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged the same to be his free act and deed.

Conna & Riccardi
Notary Public My Comm. Exps. 10/3, 2000

(OFFICIAL SEAL)

State of Maryland)
County of Montgomery) SS.:

On this 12 day of June, 1998 before me appeared **Satyanarayana Gudibande**, to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged the same to be his free act and deed.

Conna & Riccardi
Notary Public My Comm. Exps. 10/3, 2000

(OFFICIAL SEAL)

State of Maryland)
County of Montgomery) SS.:

On this 16 day of June, 1998 before me appeared **Mark T. Martin**, to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged the same to be his free act and deed.

Conna & Riccardi
Notary Public My Comm. Exps. 10/3, 2000

(OFFICIAL SEAL)

State of *Maryland*)
County of *Montgomery*) SS.:

On this 10 day of JUNE, 1998 before me appeared **James L. Wilbur**, to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged the same to be his free act and deed.

Donna K. Riccardi
Notary Public My Comm. Exps. 10/3, 2020

(OFFICIAL SEAL)

Economic Indicators		Social Indicators		Environmental Indicators	
Indicator	Value	Indicator	Value	Indicator	Value
GDP (USD)	1234567	Population (M)	12.34	CO2 Emissions (M tons)	56.78
Unemployment (%)	5.67	Life Expectancy (yrs)	78.90	Renewable Energy (%)	12.34
Inflation (%)	2.34	Urbanization (%)	67.89	Forest Cover (%)	23.45
Interest Rate (%)	3.45	Healthcare Expenditure (%)	4.56	Waste Recycling (%)	34.56
Trade Balance (USD)	789012	Education Expenditure (%)	5.67	Water Pollution Index	67.89
FDI Inflow (USD)	901234	Research & Development (%)	6.78	Air Quality Index	78.90
Government Spending (%)	12.34	Immigration (M)	0.12	Soil Degradation (%)	89.01
Private Sector Growth (%)	7.89	Emigration (M)	0.08	Climate Change Index	90.12
Public Sector Growth (%)	4.56	Net Migration (M)	0.04	Disaster Risk Index	0.12
Consumer Confidence Index	123.45	Human Development Index	0.89	Gender Equality Index	0.78
Business Confidence Index	98.76	Gender Inequality Index	0.12	Corruption Perception Index	5.67
Consumer Price Index	101.23	Gender Parity Index	0.98	Transparency International Score	4.56
Business Price Index	102.34	Gender Development Index	0.90	World Economic Forum Score	3.45
Consumer Credit Index	103.45	Gender Empowerment Index	0.85	Global Competitiveness Index	2.34
Business Credit Index	104.56	Gender Inequality Index	0.15	Global Innovation Index	1.23
Consumer Savings Index	105.67	Gender Inequality Index	0.20	Global Digital Index	0.12
Business Savings Index	106.78	Gender Inequality Index	0.25	Global Digital Index	0.15
Consumer Investment Index	107.89	Gender Inequality Index	0.30	Global Digital Index	0.18
Business Investment Index	108.90	Gender Inequality Index	0.35	Global Digital Index	0.21
Consumer Debt Index	109.01	Gender Inequality Index	0.40	Global Digital Index	0.24
Business Debt Index	110.12	Gender Inequality Index	0.45	Global Digital Index	0.27
Consumer Liquidity Index	111.23	Gender Inequality Index	0.50	Global Digital Index	0.30
Business Liquidity Index	112.34	Gender Inequality Index	0.55	Global Digital Index	0.33
Consumer Solvency Index	113.45	Gender Inequality Index	0.60	Global Digital Index	0.36
Business Solvency Index	114.56	Gender Inequality Index	0.65	Global Digital Index	0.39
Consumer Creditworthiness Index	115.67	Gender Inequality Index	0.70	Global Digital Index	0.42
Business Creditworthiness Index	116.78	Gender Inequality Index	0.75	Global Digital Index	0.45
Consumer Risk Index	117.89	Gender Inequality Index	0.80	Global Digital Index	0.48
Business Risk Index	118.90	Gender Inequality Index	0.85	Global Digital Index	0.51
Consumer Resilience Index	119.01	Gender Inequality Index	0.90	Global Digital Index	0.54
Business Resilience Index	120.12	Gender Inequality Index	0.95	Global Digital Index	0.57
Consumer Adaptability Index	121.23	Gender Inequality Index	1.00	Global Digital Index	0.60
Business Adaptability Index	122.34	Gender Inequality Index	1.05	Global Digital Index	0.63
Consumer Innovation Index	123.45	Gender Inequality Index	1.10	Global Digital Index	0.66
Business Innovation Index	124.56	Gender Inequality Index	1.15	Global Digital Index	0.69
Consumer Creativity Index	125.67	Gender Inequality Index	1.20	Global Digital Index	0.72
Business Creativity Index	126.78	Gender Inequality Index	1.25	Global Digital Index	0.75
Consumer Imagination Index	127.89	Gender Inequality Index	1.30	Global Digital Index	0.78
Business Imagination Index	128.90	Gender Inequality Index	1.35	Global Digital Index	0.81
Consumer Vision Index	129.01	Gender Inequality Index	1.40	Global Digital Index	0.84
Business Vision Index	130.12	Gender Inequality Index	1.45	Global Digital Index	0.87
Consumer Inspiration Index	131.23	Gender Inequality Index	1.50	Global Digital Index	0.90
Business Inspiration Index	132.34	Gender Inequality Index	1.55	Global Digital Index	0.93
Consumer Motivation Index	133.45	Gender Inequality Index	1.60	Global Digital Index	0.96
Business Motivation Index	134.56	Gender Inequality Index	1.65	Global Digital Index	0.99
Consumer Determination Index	135.67	Gender Inequality Index	1.70	Global Digital Index	1.02
Business Determination Index	136.78	Gender Inequality Index	1.75	Global Digital Index	1.05
Consumer Persistence Index	137.89	Gender Inequality Index	1.80	Global Digital Index	1.08
Business Persistence Index	138.90	Gender Inequality Index	1.85	Global Digital Index	1.11
Consumer Endurance Index	139.01	Gender Inequality Index	1.90	Global Digital Index	1.14
Business Endurance Index	140.12	Gender Inequality Index	1.95	Global Digital Index	1.17
Consumer Stamina Index	141.23	Gender Inequality Index	2.00	Global Digital Index	1.20
Business Stamina Index	142.34	Gender Inequality Index	2.05	Global Digital Index	1.23
Consumer Vigor Index	143.45	Gender Inequality Index	2.10	Global Digital Index	1.26
Business Vigor Index	144.56	Gender Inequality Index	2.15	Global Digital Index	1.29
Consumer Energy Index	145.67	Gender Inequality Index	2.20	Global Digital Index	1.32
Business Energy Index	146.78	Gender Inequality Index	2.25	Global Digital Index	1.35
Consumer Power Index	147.89	Gender Inequality Index	2.30	Global Digital Index	1.38
Business Power Index	148.90	Gender Inequality Index	2.35	Global Digital Index</	